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protected carboxyl group; b-2) an optionally substituted C3-C6 cycloalkyl-C1-C4 alkyl group; or b-3) an optionally substituted C3-C6 cycloalkyl group, or 4) a dihydroxopyrimidyl group which may be substituted with a) a halogen atom or a C1-C6 alkyl group, and whose nitrogen atom is further substituted with b-1) a C1-C6 alkyl group which may be substituted with a halogen atom, hydroxyl or an optionally protected carboxyl group; b-2) an optionally substituted C3-C6 cycloalkyl-C1-C4 alkyl group; or b-3) a C3-C6 cycloalkyl group.

- 5. (Amended) The condensed imidazole compound according to claim 1, a pharmacologically acceptable salt thereof or hydrates thereof, wherein Ar is an optionally substituted aryl.
- 6. (Amended) The condensed imidazole compound according to claim 1, a pharmacologically acceptable salt thereof or hydrates thereof, wherein Ar is a phenyl substituted with a halogen atom.
- 7. (Amended) The condensed imidazole compound according to claim 1, a pharmacologically acceptable salt thereof or hydrates thereof, wherein  $R^1$  is represented by the formula  $-NR^4R^5$  (wherein  $R^4$  and  $R^5$  are the same as or different from each other and each represents hydrogen, a C1-C8 alkyl group or a C3-C8 cycloalkyl group, or a C2-C5 saturated cyclic amino group which is formed with a nitrogen atom to which they bind, whereupon this ring may contain oxygen, sulfur or nitrogen other than the nitrogen and

may be substituted with a C1-C4 alkyl group which may be substituted with a halogen atom.

- 8. (Amended) The condensed imidazole compound according to claim 1, a pharmacologically acceptable salt thereof or hydrates thereof, wherein  $\mathbb{R}^1$  is amino.
- 9. (Amended) The condensed imidazole compound according to claim 1, a pharmacologically acceptable salt thereof or hydrates thereof, wherein  $R^1$  is amino;  $R^2$  is hydrogen; and  $R^3$  is 1) a pyridyl group which may be substituted with hydroxyl or a C1-C6 alkyl group or 2) a 1,2-dihydro-2-oxopyridyl group which may be substituted with a) a halogen atom or a C1-C6 alkyl group, and whose nitrogen atom may further be substituted with b-1) a C1-C6 alkyl group which may be substituted with a halogen atom, hydroxyl or an optionally protected carboxyl group; b-2) an optionally substituted C3-C6 cycloalkyl-C1-C4 alkyl group; or b-3) an optionally substituted C3-C6 cycloalkyl-group.
- 10. (Amended) The condensed imidazole compound according to claim 1, a pharmacologically acceptable salt thereof or hydrates thereof, wherein  $R^1$  is amino,  $R^2$  is hydrogen, and  $R^3$  is a 1,2-dihydro-2-oxopyridyl group whose nitrogen may be substituted with a C1 to C6 alkyl group which may be substituted with a halogen atom.

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A3

11. (Amended) The condensed imidazole compound according to claim 1, a pharmacologically acceptable salt thereof or hydrates thereof, wherein  $R^1$  is amino,  $R^2$  is a C2 alkynyl group which is substituted with hydroxyll group and a C4-C6 cycloalkyl group,  $R^3$  is a C3 alkenyl group, and Ar is a phenyl substituted with a halogen atom.

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16. (Amended) An agent for preventing or treating diabetes mellitus, which comprises the condensed imidazole compound according to claim 1, a pharmacologically acceptable salt thereof or hydrates thereof as the active ingredient.

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- 17. (Amended) An agent for preventing or treating diabetic complications, which comprises the condensed imidazole compound according to claim 1, a pharmacologically acceptable salt thereof or hydrates thereof as the active ingredient.
- 18. (Amended) An agent for preventing or treating diseases against which the condensed imidazole compound according to claim 1, a pharmacologically acceptable salt thereof or hydrates thereof is effective.
- 19. (Amended) An agent for preventing or treating diabetic retinopathy, which comprises the condensed imidazole compound according to claim 1, a pharmacologically acceptable salt thereof or hydrates thereof as the active ingredient.

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20. (Amended) An adenosine A2 receptor antagonist comprising the condensed inidazole compound according to claim 1, a pharmacologically acceptable salt thereof or hydrates thereof.

A4

21. (Amended) A pharmaceutical composition comprising the condensed imidazole compound according to claim 1, a pharmacologically acceptable salt thereof or hydrates thereof and a pharmacologically acceptable carrier.

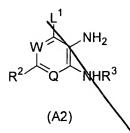


23. (Amended) A process for producing an acylaminopyridine compound, acylaminopyrimidine compound or acylaminobenzene compound (A3) represented by the following formula:



(A3)

(wherein  $L^1$ ,  $R^2$ ,  $R^3$ , Ar, Q and W have the same meanings as defined below, respectively), a salt thereof or hydrates thereof, which comprises allowing an aminopyridine compound aminopyrimidine compound or aminobenzene compound (A2) represented by the following formula:



(wherein L<sup>1</sup> represents a halogen atom; R<sup>2</sup> represents 1) hydrogen, 2) a halogen atom, 3) formula  $-NR^6R^7$  (wherein  $R^6$  and  $R^7$  are the same as or different from each other and represent hydrogen, a C2-C5 acyl group, a  $\bigcirc$ C1-C8 alkyl group or a C3-C8 cycloalkyl group, or  $R^6$  and  $R^7$  represent a C2-C5 saturated cyclic amino group which is formed with a nitrogen atom to which they bind, whereupon this ring may contain an oxygen atom, a sulfur atom or a nitrogen atom other than  $\backslash$ the nitrogen atom and may be substituted with a C1-C4 alkyl group which may be substituted with a halogen atom), 4) a C2-C8\alkynyl group which may be substituted with a halogen atom, hydr $\delta_{xyl}$ , a C1-C4 alkyl group or a C3-C6 cycloalkyl group, 5) a C3-C8 akenyl group which may be substituted with a halogen atom, hydroxyl or a C1-C4 alkyl group, 6) a C1-C8 alkyl group which may be subst\tauted with a halogen atom, hydroxyl or a C1-C4 alkyl group, or 7) a C1-C8 alkoxy group which may be substituted with a halogen atom, hydroxyl or a C1-C4 alkyl group; R3 represents 1) a C3-C8 alkynyl group which may be substituted with a halogen atom, a hydroxyl group or a C1-C4 alkyl group, 2) a C3-C8 alkenyl group which may be substituted with a halogen atom, a hydroxyl group or a C1-C4 alky group, 3) a C1-C8 alkyl group which may be substituted with a halogen atom, a hydroxyl group or a C1-C4 alkyl group, 4) an optionally

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substituted aryl group, 5) an optionally substituted heteroaryl group, a 1,2-dihydro-2-oxopyridyl group which substituted with a) a halogen atom or a C1-C6 alkyl group, and whose nitrogen atom may further be substituted with b-1) a C1-C6 alkyl group which may be substituted with a halogen atom, hydroxyl or an optionally protected carboxyl group, b-2) an optionally substituted C3-C6 cycloalkyl-C1-C4 alkyl group or b-3) substituted C3-C6 optionally cycloalkyl group, 7) dihydroxopyrimidyl group which may be substituted with a) halogen atom or a C1-C6 alkyl group, and whose nitrogen atom is further substituted with b-1) a C1-C6 alkyl group which may be substituted with a halogen at  $\delta_m$ , hydroxyl or an optionally protected carboxyl group, b-2) an \optionally substituted C3-C6 cycloalkyl-C1-C4 alkyl group or b-3) \a C3-C6 cycloalkyl group or 8) a dihydroxo or tetrahydrodioxopyraxinyl group which may be substituted with a) a halogen atom or a C1-C6 alkyl group and whose nitrogen atom is further substituted with b-1) a C1-C6 alkyl group which may be substituted with a halogen atom, hydroxyl or an optionally protected carboxy, b-2) an optionally substituted C3-C6 cycloalkyl-C1-C4 alkyl group, \or b-3) a C3-C6 cycloalkyl group; and Q and W are the same as or different from each other and each represents N or CH), to react with an acyl compound represented by the formula ArCOX (wherein X represents a halogen atom; and Ar represents 1) an optionally substituted aryl group, 2) an optionally substituted heteroaryl group, 3) oxopyridyl group which may be substituted with a halogen atom or

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320 cont a C1-C6 alkyl group and whose nitrogen atom is substituted with a C1-C6 alkyl group or a C3-C6 cycloalkyl group, or 4) an oxopyrimidyl group which may be substituted with a halogen atom or a C1-C6 alkyl group and whose nitrogen atom is substituted with a C1-C6 alkyl group or a C3-C6 cycloalkyl group).

24. (Amended) A process for producing an acylaminopyridine compound, acylaminopyrimidine compound or acylaminobenzene compound (A3) represented by the following formula:

$$R^2$$
 Q  $NHR^3$ 

(A3)

(wherein  $L^1$ ,  $R^2$ ,  $R^3$ , Ar, Q and W have the same meanings as defined above, respectively), a salt thereof or hydrates thereof, which comprises allowing an aminopyridine compound, aminopyrimidine compound or aminobenzene compound (A2) represented by the following formula:

$$R^2$$
  $Q$   $NHR^3$ 

(A2)

(wherein  $L^1$ ,  $R^2$ ,  $R^3$ , Q and W have the same meanings as defined above, respectively) to react in the presence of pyridine with an acyl compound represented by the formula ArCOX (wherein X and Ar have the same meanings as defined above, respectively).

25. (Amended) The process for producing an acylaminopyridine compound, acylaminopyrimidine compound or acylaminobenzene compound (A3), a salt thereof or hydrates thereof according to claim 23 or 24, wherein R<sup>3</sup> is an N-C1-C8 alkyl-2-oxopyrimidinyl group.

26. (Amended) A process for producing an imidazopyridine compound, imidazopyrimidine compound or imidazobenzene compound (A4), a salt thereof or hydrates thereof represented by the following formula:

$$\mathbb{R}^2$$
 $\mathbb{Q}$ 
 $\mathbb{N}$ 
 $\mathbb{R}^3$ 
(A4)

(wherein  $L^1$ ,  $R^2$ ,  $R^3$ , Ar, Q and W have the same meanings as defined above, respectively), which comprises subjecting an acylaminopyridine compound, acylaminopyridine compound or acylaminobenzene compound (A3) represented by the following formula:

$$\mathbb{R}^{2} \stackrel{L^{1}}{\bigvee_{Q}} \mathbb{N} \mathbb{H} \mathbb{R}^{3}$$

(A3)

(wherein  $L^1$ ,  $R^2$ ,  $R^3$ , Ar, Q and W have the same meanings as defined

above, respectively) to ring-closure reaction in the presence of POCl<sub>3</sub>.

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27. (Amended) A process for producing an imidazopyridine compound, imidazopyrimidine compound or imidazobenzene compound (A4), a salt thereof or hydrates thereof represented by the following formula:

$$\mathbb{R}^2$$
 $\mathbb{Q}$ 
 $\mathbb{R}^3$ 

(A4)

(wherein  $L^1$ ,  $R^2$ ,  $R^3$ , Ar, Q and W have the same meanings as defined above, respectively), which comprises subjecting an acylaminopyridine compound, acylaminopyrimidine compound or acylaminobenzene compound (A3) represented by the following formula:

$$\begin{array}{c|c}
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(A3)

(wherein  $L^1$ ,  $R^2$ ,  $R^3$ , Ar, Q and W have the same meanings as defined above, respectively) to ring-closure reaction in the presence of hydrochloric acid or using hydrochloride of an acylaminopyridine compound, acylaminopyrimidine compound or acylaminobenzene compound (A3).

28. (Amended) A process for producing an imidazopyridine compound, imidazopyrimidine compound or imidazobenzene compound (A4), a salt thereof or hydrates thereof represented by the following formula:

$$R^2$$
 $Q$ 
 $N$ 
 $R^3$ 
 $(A4)$ 

(wherein L<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup>, Ar, Q and W have the same meanings as defined above, respectively), which comprises subjecting an acylaminopyridine compound, acylaminopyrimidine compound or acylaminobenzene compound (A3) represented by the following formula:

(A3)

(wherein  $L^1$ ,  $R^2$ ,  $R^3$ , Ar, Q and W have the same meanings as defined above, respectively) to ring-closure reaction in NMP (1-methyl-2-pyrrolidone) under heating.

29. (Amended) The process for producing an imidazopyridine compound, imidazopyrimidine compound or imidazobenzene compound (A4), a salt thereof or hydrates thereof according to claims 24

and 26-28, wherein  $R^3$  is an N-C1-C8 alkyl-2-oxopyridinyl group.

30. (Amended) A process for producing an imidazopyridine compound, imidazopyrimidine compound or imidazobenzene compound (A4), a salt thereof or hydrates thereof represented by the following formula:

$$\mathbb{R}^2$$
  $\mathbb{Q}$   $\mathbb{N}$   $\mathbb{R}^3$ 

(wherein  $L^1$ ,  $R^2$ ,  $R^3$ , Ar, Q and W have the same meanings as defined above, respectively), which comprises allowing an aminopyridine compound, aminopyrimidine compound or aminobenzene compound (A2) represented by the following formula:

$$R^2$$
  $Q$   $NHR^3$ 

(A2)

(wherein  $L^1$ ,  $R^2$ ,  $R^3$ , Q and W have the same meanings as defined above, respectively) to react with an acyl compound represented by the formula ArCOX (wherein X and Ar have the same meanings as defined above, respectively); and then subjecting the product to ring-closure reaction.

31. (Amended) The process for producing an imidazopyridine

compound, imidazopyrimidine compound or imidazobenzene compound (A4), a salt thereof or hydrates thereof according to claim 30, wherein the aminopyridine compound, aminopyrimidine compound or aminobenzene compound (A2) is converted in one-pot reaction into the imidazopyridine compound, imidazopyrimidine compound or imidazobenzene compound (A4).

32. (Amended) A process for producing an aminoimidazopyridine compound, aminoimidazopyrimidine compound or aminoimidazobenzene compound (A5), a salt thereof or hydrates thereof represented by the formula:

$$\begin{array}{c|c}
NH_2 \\
N \\
N \\
N \\
N \\
R^3
\end{array}$$
(A5)

(wherein  $L^1$ ,  $R^2$ ,  $R^3$ , Ar, Q and W have the same meanings as defined respectively), comprises which aminating an imidazopyridine compound, imidazopyrimidine compound or represented by imidazobenzene compound (A4) the following formula:

$$\begin{array}{c|c}
 & \downarrow^{1} \\
 & \downarrow^{N} \\$$

(A4)

(wherein  $L^1$ ,  $R^2$ ,  $R^3$ , Ar, Q and W have the same meanings as defined

above, respectively).

33. (Amended) The process for producing aminoimidazopyridine compound, aminoimidazopyrimidine compound or aminoimidazobenzene compound (A5), a salt thereof or hydrates thereof according to claim 32, wherein R<sup>3</sup> is an N-C1-C8 alkyl-2oxopyridinyl group

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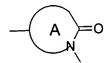
34. (Amended) A process for producing an imidazopyridine compound, imidazopyrimidine compound or imidazobenzene compound (C3), a salt thereof or hydrates thereof represented by the formula:

(C3)

(wherein  $R^{13}$  means a C1-C6 alkyl group which may be substituted with a halogen atom, hydroxyl or an optionally protected carboxyl group, an optionally substituted C3-C6 cycloalkyl-C1-C4 alkyl group, or an optionally substituted C3-C6 cycloalkyl group; and R<sup>1</sup>, the formula:

 $R^2$ , Ar, Q and W have the same meanings as defined above, respectively) which comprises alkylating an imidazopyridine compound, imidazopyrimidine compound or imidazobenzene compound (C2) represented by the following formula:

(wherein  $R^1$  represents 1) hydrogen, 2) hydroxyl, 3) a halogen atom, 4) an optionally substituted C1-C8 alkyl group or 5) formula  $-NR^4R^5$  (wherein  $R^4$  and  $R^5$  are the same as or different from each other and each represents hydrogen, a C1-C8 alkyl group or a C3-C8 cycloalkyl group, or a C2-C5 saturated cyclic amino group which is formed with a nitrogen atom to which they bind, whereupon this ring may contain oxygen, sulfur or nitrogen other than the nitrogen atom and may be substituted with a C1-C4 alkyl group which may be substituted with a halogen atom; the formula:



represents dihydrooxopyridinyl or -pyrimidyl, or dihydro- \ox

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tetrahydropyrazinyl; and  $R^2$ , Ar, Q and W have the same meanings as defined above, respectively.

- 35. (Amended) A method of preventing or treating diabetes mellitus; diabetic complications; diabetic retinopathy; diseases against which the condensed imidazole compound according to claim 1, a pharmacologically acceptable salt thereof or hydrates thereof is effective; or diseases against which an adenosine A2 receptor antagonism is effective, by administering a pharmacologically effective amount of the condensed imidazole compound according to claim 1, a pharmacologically acceptable salt thereof or hydrates thereof.
- 36. (Amended) Use of the condensed imidazole compound according to claim 1, a pharmacologically acceptable salt thereof or hydrates thereof, for producing a preventive or therapeutic agent for diabetes mellitus; diabetic complications; diabetic retinopathy; or diseases against which the condensed imidazole compound according to claim 1, a pharmacologically acceptable salt thereof or hydrates thereof is effective, or an adenosine A2 receptor antagonist.